

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS**

PENSON WORLDWIDE, INC.,

Plaintiff,

v.

SUN TRADING LLC,

Defendant.

Civil Action No. \_\_\_\_\_

**JURY TRIAL DEMANDED**

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Penson Worldwide, Inc. ("Penson" or "Plaintiff"), for its Complaint against Defendant Sun Trading LLC, ("Sun Trading" or "Defendant"), alleges the following:

**NATURE OF THE ACTION**

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

**THE PARTIES**

2. Plaintiff Penson is a corporation organized under the laws of the State of Delaware with a place of business at 5960 W. Parker Rd., #278-198, Plano, Texas 75093.

3. Upon information and belief, Sun Trading is a limited liability company organized and existing under the laws of the State of Illinois, with a place of business at 100 South Wacker Dr., Suite 300, Chicago, IL 60606 and can be served through its registered agent, Nicholas Wendland, 100 South Wacker Dr., Suite 300, Chicago, IL 60606. Upon information and belief, Sun Trading sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services that into the stream of commerce

and that incorporate infringing technology knowing that they would be sold in this judicial district and elsewhere in the United States.

#### **JURISDICTION AND VENUE**

4. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

5. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

6. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b), (c), (d) and/or 1400(b). On information and belief, Defendant conducts business in this district, the claims alleged in this Complaint arise in this District, and the acts of infringement have taken place and are continuing to take place in this District.

7. On information and belief, Defendant is subject to this Court's general and specific personal jurisdiction because Defendant has sufficient minimum contacts within the State of Illinois and this District (including via sales of Defendant's services to investors), pursuant to due process and/or the Illinois Long Arm Statute, because Defendant purposefully availed itself of the privileges of conducting business in the State of Illinois and in this District, because Defendant regularly conducts and solicits business within the State of Illinois and within this District, and because Person's causes of action arise directly from Defendant's business contacts and other activities in the State of Illinois and this District. Further, this Court has personal jurisdiction over Defendant because it is incorporated in Illinois and has purposely availed itself of the privileges and benefits of the laws of the State of Illinois.

#### **COUNT I – INFRINGEMENT OF U.S. PATENT NO. 7,542,939**

8. The allegations set forth in the foregoing paragraphs 1 through 7 are incorporated into this First Claim for Relief.

9. On June 2, 2009, U.S. Patent No. 7,542,939 (“the ’939 patent”), entitled “Modeling Financial Instruments Using Bid and Ask Prices,” was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the ’939 patent is attached as Exhibit 1.

10. The inventions of the ’939 patent resolve technical problems related to the use of computerized trading methods and systems. For example, the inventions allow parties to efficiently model a variable parameter of a financial instrument and make predictions of future values of the variable parameter for use in high frequency electronic trading systems which, on information and belief, are exclusively implemented utilizing computer technology.

11. The claims of the ’939 patent do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claims of the ’939 patent recite one or more inventive concepts that are rooted in computerized trading technology, and overcome problems specifically arising in the realm of computerized trading technologies.

12. The claims of the ’939 patent recite an invention that is not merely the routine or conventional use of the trading systems and methods. Instead, the invention applies a model to historical data pertaining to a financial instrument in order to make a rapid prediction of a future value of an investment significant parameter and rapidly execute a buy or sell order on an electronic trading system. The ’939 patent claims thus specify how data obtained from a computerized trading systems is manipulated to yield a desired result.

13. The technology claimed in the ’939 patent does not preempt all ways of using computerized trading systems, nor preempt the use of all computerized trading systems, nor preempt any other well-known or prior art technology.



14. Accordingly, each claim of the '939 patent recites a combination of elements sufficient to ensure that the claim in practice amounts to significantly more than a patent on an ineligible concept.

15. Penson is the assignee and owner of the right, title and interest in and to the '939 patent, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them.

16. On its website Sun Trading states that it “creates and deploys highly sophisticated, quantitative trading strategies, while constantly modifying existing programs to evolve with market conditions and opportunities.” (*See* [www.suntradingllc.com](http://www.suntradingllc.com).)

17. Sun Trading has been described as focusing on a variety of quantitative trading strategies (primarily high frequency) across multiple markets and asset classes. (*See, e.g.*, <http://www.wallstreetandtech.com/infrastructure/sun-trading-expands-tech-partnership-for-cross-asset-trading/d/d-id/1267404?>.)

18. On information and belief, Sun Trading uses computers to monitor bid and/or ask streams from the various exchanges to identify patterns, implements prediction models based on historical data, and subsequently executes trades based on the models' predictions.

19. Upon information and belief, Defendant has and continues to directly infringe at least claim 1 of the '939 patent by making, using, selling, importing and/or providing and causing to be used a computerized trading methods in which the computer applies a model to data obtained from computerized trading systems involving bid and/or ask values, rapidly predicts the future value of an investment significant parameter of a financial instrument, and rapidly executes a trade based on the predicted investment significant parameter (the “'939 Accused Instrumentalities”).

20. In particular, claim 1 of the '939 patent generally recites a method including generating and training a model of a financial instrument through the provision of historical bid and ask prices until the model is able to successfully match historical behavior within a predetermined degree of accuracy; selecting a bid and/or ask stream of a financial instrument; applying the trained model to the bid and/or ask stream; predicting a future value of the investment significant parameter; storing the predicted value; and using the computer to place an order for the financial instrument based on the prediction(s) made by applying the model to the bid and/or ask stream.

21. On information and belief, the '939 Accused Instrumentalities infringe claim 1 of the '939 patent.

22. On information and belief, the '939 Accused Instrumentalities are used marketed, provided to, and/or used by or for Defendant's partners, clients, customers and end users across the country and in this District.

23. Defendant was made aware of the '939 patent and its infringement thereof at least as early as the filing of this Complaint.

24. Upon information and belief, since at least the time Defendant received notice, Defendant has induced and continues to induce others to infringe at least one claim of the '939 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Defendant's partners, clients, customers, and end users, whose use of the Accused Instrumentalities constitutes direct infringement of at least one claim of the '939 patent.

25. In particular, Defendant's actions that aid and abet others such as its partners, customers, clients, and end users to infringe include advertising and distributing the '939

Accused Instrumentalities and providing instruction materials, training, and services regarding the '939 Accused Instrumentalities. On information and belief, Defendant has engaged in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because Defendant has had actual knowledge of the '939 patent and knowledge that its acts were inducing infringement of the '939 patent since at least the date Defendant received notice that such activities infringed the '939 patent.

26. Upon information and belief, Defendant is liable as a contributory infringer of the '939 patent under 35 U.S.C. § 271(c) by offering to sell, selling and importing into the United States computerized trading platforms to be especially made or adapted for use in an infringement of the '939 patent. The '939 Accused Instrumentalities are a material component for use in practicing the '939 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

27. Person has been harmed by Defendant's infringing activities.

**COUNT II – INFRINGEMENT OF U.S. PATENT NO. 8,090,644**

28. The allegations set forth in the foregoing paragraphs 1 through 27 are incorporated into this Second Claim for Relief.

29. On January 3, 2012, U.S. Patent No. 8,090,644 ("the '644 patent"), entitled "Modeling Financial Instruments Using Bid and Ask Prices," was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the '644 patent is attached as Exhibit 2.

30. The inventions of the '644 patent resolve technical problems related to the use of computerized trading methods and systems. For example, the inventions allow parties to efficiently model a variable parameter of a financial instrument and make predictions of future



values of the variable parameter for use in high frequency electronic trading systems which, on information and belief, are exclusively implemented utilizing computer technology.

31. The claims of the '644 patent do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claims of the '644 patent recite one or more inventive concepts that are rooted in computerized trading technology, and overcome problems specifically arising in the realm of computerized trading technologies.

32. The claims of the '644 patent recite an invention that is not merely the routine or conventional use of the trading systems and methods. Instead, the invention applies a model to historical data pertaining to a financial instrument in order to make a rapid prediction of a future value of an investment significant parameter and rapidly execute a buy or sell order on an electronic trading system. The '644 patent claims thus specify how data obtained from a computerized trading systems is manipulated to yield a desired result.

33. The technology claimed in the '644 patent does not preempt all ways of using computerized trading systems, nor preempt the use of all computerized trading systems, nor preempt any other well-known or prior art technology.

34. Accordingly, each claim of the '644 patent recites a combination of elements sufficient to ensure that the claim in practice amounts to significantly more than a patent on an ineligible concept.

35. Penson is the assignee and owner of the right, title and interest in and to the '644 patent, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them.

36. On its website Sun Trading states that it “creates and deploys highly sophisticated, quantitative trading strategies, while constantly modifying existing programs to evolve with market conditions and opportunities.” (*See* [www.suntradingllc.com](http://www.suntradingllc.com).)

37. Sun Trading has been described as focusing on a variety of quantitative trading strategies (primarily high frequency) across multiple markets and asset classes. (*See, e.g.*, <http://www.wallstreetandtech.com/infrastructure/sun-trading-expands-tech-partnership-for-cross-asset-trading/d/d-id/1267404?>.)

38. On information and belief, Sun Trading uses computers to monitor bid and/or ask streams from the various exchanges to identify patterns, implements prediction models based on historical data, and subsequently executes trades based on the models’ predictions.

39. Upon information and belief, Defendant has and continues to directly infringe at least claims 1 and 11 of the ’644 patent by making, using, selling, importing and/or providing and causing to be used a computerized trading methods in which the computer applies a model to data obtained from computerized trading systems involving bid and/or ask values, rapidly predicts the future value of an investment significant parameter of a financial instrument, and rapidly executes a trade based on the predicted investment significant parameter (the “’644 Accused Instrumentalities”).

40. In particular, claim 1 of the ’644 patent generally recites a method for modeling an investment significant parameter of a financial instrument, using a computer

41. On information and belief, the ’644 Accused Instrumentalities infringe claim 1 of the ’644 patent.

42. Claim 11 of the ’644 patent generally recites a method for modeling an investment significant parameter of a financial instrument, using a computer, providing, as



training data, historical bid and/or ask prices of a financial instrument; selecting a financial model having at least one variable parameter to match the model's behavior to the behavior of the financial instrument; providing to the model an initial value of the at least one variable parameter; and estimating at least one variable parameter of a financial instrument including the future bid or future ask price by applying the historical bid and/or ask data to the model until the predictions generated by the model substantially correspond to historical values of the at least one investment significant parameter.

43. On information and belief, the '644 Accused Instrumentalities infringe claim 11 of the '644 patent.

44. On information and belief, the '644 Accused Instrumentalities are used marketed, provided to, and/or used by or for Defendant's partners, clients, customers and end users across the country and in this District.

45. Defendant was made aware of the '644 patent and its infringement thereof at least as early as the filing of this Complaint.

46. Upon information and belief, since at least the time Defendant received notice, Defendant has induced and continues to induce others to infringe at least one claim of the '644 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Defendant's partners, clients, customers, and end users, whose use of the '644 Accused Instrumentalities constitutes direct infringement of at least one claim of the '644 patent.

47. In particular, Defendant's actions that aid and abet others such as its partners, customers, clients, and end users to infringe include advertising and distributing the '644 Accused Instrumentalities and providing instruction materials, training, and services regarding

the '644 Accused Instrumentalities. On information and belief, Defendant has engaged in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because Defendant has had actual knowledge of the '644 patent and knowledge that its acts were inducing infringement of the '644 patent since at least the date Defendant received notice that such activities infringed the '644 patent.

48. Upon information and belief, Defendant is liable as a contributory infringer of the '644 patent under 35 U.S.C. § 271(c) by offering to sell, selling and importing into the United States computerized trading platforms to be especially made or adapted for use in an infringement of the '644 patent. The '644 Accused Instrumentalities are a material component for use in practicing the '644 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

49. Penson has been harmed by Defendant's infringing activities.

#### **JURY DEMAND**

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Penson demands a trial by jury on all issues triable as such.

#### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff Penson demands judgment for itself and against Defendant as follows:

- A. An adjudication that Defendant has infringed the '939 and '644 patents;
- B. An award of damages to be paid by Defendant adequate to compensate Penson for Defendant's past infringement of the '939 and '644 patents, and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Plaintiff's reasonable attorneys' fees; and

D. An award to Penson of such further relief at law or in equity as the Court deems just and proper.

Dated: 7/29/16

STEVEN O. ROSS, P.C.

*/s/ Steven O. Ross*

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